Correspondence

The Editors will be pleased to receive and consider for publication correspondence containing information of interest to physicians or commenting on issues of the day. Letters ordinarily should not exceed 600 words and must be typewritten, double-spaced, and submitted in duplicate (the original typescript and one copy). Authors will be given the opportunity to review the editing of their correspondence before publication.

Earthquakes and the Practicing Physician

To the Editor: We read with interest the recent article by Conover describing how office-based surgeons could prepare for the next Great Quake.[1] He has issued a warning that many people in California are beginning to heed, but he leaves unanswered how physicians other than office-based surgeons might contribute to the medical aspects of earthquake preparedness. In the worst-case scenario, experts predict as many as 100,000 casualties after the Great Quake.[1-4] Because many hospitals will be destroyed or rendered nonfunctional, and outside assistance will not begin to arrive for at least 72 hours,[1,4,5] it is critical that physicians and other health care personnel be prepared to provide immediate care under these austere conditions.

Fortunately, there is a program that has been in existence since 1989 in Orange County to address this problem, called Medical Disaster Response (MDR). For this program a nonprofit corporation has developed for the public benefit a plan to provide both the equipment and the training to enable volunteer physicians, nurses, and other medical professionals to provide immediate, on-scene, advanced medical care to victims of a massive earthquake. It is the only program of its kind currently available in the United States.

The plan involves a course curriculum that includes triage instruction, administering field anesthesia and analgesia, airway intervention, the management of crush injuries and amputations, and integration into the incident command system. Following didactic instruction, physicians participate in hands-on training with a computer interactive disaster simulation and a crush injury laboratory during which procedures are practiced on cadaver material.

The MDR equipment consists of critical care supplies and exists in two formats: a solo backpack and supply modules. These backpacks are issued to physicians who complete the course, and they contain sufficient supplies to treat four to six critically injured victims. Physicians keep them with them at all times, usually in the trunk of their cars. The supply modules contain enough equipment to treat 20 to 25 critically injured victims for 24 hours. These are stored within the community in such locations as schools or fire stations.

The Medical Disaster Response program is the result of seven years of research and development. To date, MDR has conducted four disaster medical director courses and trained 152 physicians, 74 nurses, and 13 allied health professionals. The first sets of modules are now in place, and 40 backpacks have been distributed to physicians, with plans under way to persuade hospitals to fill them. Ultimately 125 to 150 modules will need to be pre-positioned and 375 physicians and 1,000 nurses and other support personnel will need to be trained to cover the entire county.

Disaster planning and preparation is a complex task requiring involvement by local, state, and federal agencies. Because 90% of survivors are rescued by civilian volunteers within the first 24 hours,[6] a local plan for immediate advanced medical help for these victims is crucial to prevent the thousands of deaths that would otherwise occur. The MDR project offers all health care professionals an opportunity to change what would otherwise be a needlessly deadly event. As indicated by the recent 7.5 earthquake in Landers, California, we have no time to lose.

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3. Toppozada TH, Bennett JH, Borchardt GH, et al: Earthquake Planning Scenario for a Major Earthquake on the Newport-Inglewood Fault Zone—Special Publication 99. Sacramento, Calif, Division of Mines and Geology, 1988

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5. Waeckerle JF: Disaster planning and response. N Engl J Med 1991; 324:815-821

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Blood-Saturated Shoe Covers

To the Editor: I read with interest the article by Paul Summers, MD, and colleagues in the August issue.[1] I wholly concur with the authors' conclusion that shoe covers are a possible source of blood contamination and cross-contamination. At my institution, in heavily contaminated or infected cases, surgeons are required to remove shoe covers inside the operating room before exiting into the hallway. I think that, at this time of high risk for AIDS [the acquired immunodeficiency syndrome] and hepatitis, all cases should be treated as potentially contaminated or infected. Therefore, at the end of operations, surgeons should remove shoe covers with a gloved hand before removing gowns and gloves. This precaution is of the utmost importance, not only to prevent transmission of the AIDS virus in fresh blood but also to prevent exposure to the hepatitis virus, which stays alive in dried blood for an extended time.

I congratulate the authors on presenting a most interesting and important point.

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